

Listing of Claims

The following listing of claims will replace all prior versions, and listings, of claims in the subject application:

1. (original) An image forming apparatus for forming an image on a recording medium by ejecting drops of recording fluid from a recording head, comprising:

a waste tank having a space for containing waste fluid;

obtaining means for obtaining a correlation value that has a correlation to a deposited state of the waste fluid in the space within the waste tank; and

judging means for judging whether or not the correlation value exceeds a reference value.

2. (original) The image forming apparatus as claimed in claim 1, wherein the obtaining means obtains the correlation value from a number of times a recovery process is carried out to eject from the recording head recording fluid that does not contribute to image formation.

3. (currently amended) The image forming apparatus as claimed in claim 1 [[or 2]], wherein the waste tank includes an absorbing member for absorbing and holding the waste fluid, and detection means for detecting a fully absorbed state of the absorbing member.

4. (original) The image forming apparatus as claimed in claim 3, wherein a volume ratio of the space and the absorbing member within the waste tank is in a range of 1:4 to 3:2,

5. (currently amended) The image forming apparatus as claimed in ~~any of claims 1 to 4~~ claim 1, wherein the reference value is changed based on a recovery process frequency at which the recovery process is carried out.

6. (original) The image forming apparatus as claimed in claim 5, wherein the recovery process frequency is obtained based on a total number of recovery processes carried out during a total used time of the waste tank.

7. (currently amended) The image forming apparatus as claimed in ~~any of claims 1 to 4~~ claim 1, wherein the reference value is constant.

8. (currently amended) The image forming apparatus as claimed in ~~any of claims 1 to 7~~ claim 1, wherein the correlation value is corrected depending on an environment condition.

9. (currently amended) The image forming apparatus as claimed in ~~any of claims 1 to 8~~ claim 1, wherein a usable state of the image forming apparatus is limited when the correlation value exceeds the reference value.

10. (currently amended) The image forming apparatus as claimed in ~~any of claims 1 to 9~~ claim 1, wherein the recording fluid includes a water-dispersible coloring agent, a wetting agent and a penetrating agent, and has a viscosity increase rate due to moisture evaporation that is 1.0 or less up to a moisture evaporation rate of 30% with respect to a total weight of

the recording fluid and is 50 or greater for moisture evaporation rates of higher than 30% and less than or equal to 45%.